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10/521,451	09/15/2005	Corinne Le Bihan	90500-000040/US	2383
30593 7590 09/10/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER ABYANEH, ALI S				
ART UNIT		PAPER NUMBER		
2137				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/521,451

**Applicant(s)**

LE BUHAN ET AL.

**Examiner**

ALI S. ABYANEH

**Art Unit**

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)  
Paper No(s)/Mail Date 01-18-2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in response to the applicant's preliminary amendment dated 01/13/2005. In the amendment claims 1-16 are cancelled, claims 17-33 are newly added and title of the invention is replaced.
2. Claims 17-33 are presented for examination.

### **Information Disclosure Statement PTO-1449**

3. The Information Disclosure Statement submitted by applicant on 01-18-2005 has been considered. Please see attached PTO-1449.

### **Specification**

4. The **disclosure** is objected to because of the following informalities:  
It is not clear in the layout of the specification as where the back ground, summary or detailed description starts and ends.

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
  - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
  - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
  - (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
  - (e) BACKGROUND OF THE INVENTION.
    - (1) Field of the Invention.
    - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
  - (f) BRIEF SUMMARY OF THE INVENTION.
  - (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
  - (h) DETAILED DESCRIPTION OF THE INVENTION.
  - (i) CLAIM OR CLAIMS (commencing on a separate sheet).
  - (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
  - (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
5. The abstract of the disclosure is objected to because it includes acronyms referring to elements in the drawing.
- Appropriate correction is required.

### **Claim Objections**

6. Claims 17-18, 21, 24, 27 and 30-33 are objected to for following informalities:
- Claim 17, in line 3 and 5 includes words "these" and "this", and in line 4 includes "thanks to a network key". To provide more clarity examiner suggests replacing

words "these" and "this" to word "the" and deleting "thanks to a network key" from the claim language.

In claim 18, after "transferred" before "the broadcasting device" change "in" to --to-- .

Claims 21 and 27 are objected to for informalities similar to claim 17.

Claims 24 and 33 are objected to for being duplicated claims.

In claim 30, second line, after "said", before "center" add --verification--.

In claim 31 remove "on one hand" and "on the other hand".

The objected informalities shown as examples are not meant to be exclusive.

Applicants are encouraged to review all the presented claims and correct similar informalities if any.

### **Claim Rejections - 35 USC § 112**

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the claim it is not clear as what applicant means by "**which sends back to it** the corresponding cryptogram". In particular it is unclear as who is sending back the corresponding cryptograms and where it is being sent to.

9. Claim 24 recites the limitation "the white list" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 17, 25-27 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Torigai et al. (US Patent No. 6,038,321).

**Regarding claim 17**

Torigai teaches a validity verification method for a network key in a digital domestic network comprising at least a broadcasting device and a processing device, the broadcasting device having encrypted data to broadcast to the processing device, these data being accessible by the processing device (column 5, lines 62-65) , this method comprising following steps: transmission of a test key by the broadcasting device to the processing device, calculation of a cryptogram in the processing device resulting from the test key encryption by the network key, sending of the cryptogram to the broadcasting device, determination of the network key validity by the broadcasting device by

comparing the cryptogram with a list of control cryptograms (column 10, lines 24-52).

**Regarding claim 25-27 and 30**

Torigai furthermore teaches, wherein the broadcasting device comprises a converter module in charge of the verification operations; wherein the processing device comprises a terminal module storing the network key; wherein the control list is stored in a memory of the broadcasting device, the comparison with the cryptogram is carried out by this device; and wherein the control list is stored by a verification center, the broadcasting device transmits the cryptogram to said center for carrying out the verification (column 5, line 62-column 6, line 64).

**Claim Rejections - 35 USC § 103**

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 18-21, 23, 24, 28 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torigai et al. (US Patent No. 6,038,321) in view of Medvinsky et al. (US Patent No. 7,237,108 B2).

**Regarding claim 18**

Torigai teaches all limitation of the claim as applied to claim 17 above.

Torigai furthermore teaches wherein the test key and the list of control cryptograms constitute control data (column 10, lines 40-52). Torigai does not explicitly teach control data are generate in a verification center and transferred in the broadcasting device. However, in an analogous art, Medvinsky teaches control data are generate in a verification center and transferred in the broadcasting device (column 7, lines 14-35).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Torigai to include generating control data in a verification center and transferring in the broadcasting device. This would have been obvious because person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to provide a secure transmission of real time content in a network (column 1, line 35).

**Regarding claim 19**

Torigai teaches all limitation of the claim as applied to claim 17 above.

Torigai furthermore teaches, wherein the test key is determined by the broadcasting device, the list of control cryptograms is calculated by the broadcasting device on the base of a predetermined list of network keys and constituting the control data, each control cryptogram being the result of the



encryption of a listed network key with the test key (column 5, lines 59-65).

Torigai does not explicitly teach the list of control cryptograms is calculated by the broadcasting device on the base of a predetermined list of network keys transmitted by a verification center. However, in an analogous art, Medvinsky teaches the list of control cryptograms is calculated by the broadcasting device on the base of a predetermined list of network keys transmitted by a verification center (column 5, lines 59-65).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Torigai to include the list of control cryptograms is calculated by the broadcasting device on the base of a predetermined list of network keys transmitted by a verification center. This would have been obvious because person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to provide a secure transmission of real time content in a network (column 1, line 35).

#### **Regarding claim 20**

Torigai furthermore teaches wherein the test key is randomly generated and serves also as session key for the encryption of the encrypted data (column 10, lines 24-28)

**Regarding claim 21**

Torigai furthermore teaches wherein the broadcasting device generates at least two test keys and transmit them to the processing device, which sends back to it the corresponding cryptograms and its associated test key for the verification operations and an other cryptogram and its associated test key as session key for the data encryption (column 5, lines 62-67).

**Regarding claim 23**

Torigai furthermore teaches wherein the list of control cryptograms consists of a white list containing the cryptograms obtained by the encryption of the test key with valid network keys (column 6, lines 15-20).

**Regarding claim 24**

Torigai furthermore teaches wherein a cryptogram presents in the black list or absent from the white list is refused during the comparison, an error signalization inviting the user to change the terminal module is then generated (column 10, lines 59-64).

**Regarding claim 28**

Torigai furthermore teaches wherein the control data consist of an address indicating where the control list can be downloaded via Internet by means of the

broadcasting device, said list is then stored in the memory of the broadcasting device (column 10, lines 24-52).

**Regarding claim 31-33**

Torigai furthermore teaches, wherein the broadcasting device is a DVD disc reader, this disc comprising on one hand the encrypted data and on the other hand the control data; wherein the broadcasting device is a pay television decoder receiving the encrypted data and the control data from a managing center (column 12, lines 48-50); and wherein a cryptogram present in the black list or absent from the white list is refused during the comparison, an error signalization inviting the user to change the terminal module is then generated (column 10, lines 59-64).

14. Claims 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torigai et al. (US Patent No. 6,038,321) in view of Medvinsky et al. (US Patent No. 7,237,108 B2) further in view of Gulcu et al. (US Patent No. 6,925,562 B2).

**Regarding claim 22**

Torigai and Medvinsky teach all limitation of the claim as applied to claim 18 above. Torigai and Medvinsky do not explicitly teach the list of control cryptograms consists of a black list containing the cryptograms obtained by the encryption of the test key with invalid network keys. However, in an analogous

art, Gulcu teaches the list of control cryptograms consists of a black list containing the cryptograms obtained by the encryption of the test key with invalid network keys (column 4, lines 48-56).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Torigai and Medvinsky to include the list of control cryptograms consists of a black list containing the cryptograms obtained by the encryption of the test key with invalid network keys. This would have been obvious because person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to provide systems enabling the protection of a lost or stolen computer system (column 4, lines 9-10).

15. Claims 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torigai et al. (US Patent No. 6,038,321) in view of Gulcu et al. (US Patent No. 6,925,562 B2).

**Regarding claim 29**

Torigai teaches all limitation of the claim as applied to claim 18 above. Torigai does not explicitly teach the converter module verifies the authenticity of the control list by means of a signature on said data. However, in an analogous art Gulcu teaches the converter module verifies the authenticity of the control list by means of a signature on said data (column 9, lines 35-48).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Torigai to include verifying the authenticity of the control list by means of a signature on said data. This would have been obvious because person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to provide systems enabling the protection of a lost or stolen computer system (column 4, lines 9-10).

### **Conclusion**

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Abyaneh whose telephone number is (571) 272-7961. The examiner can normally be reached on Monday-Friday from (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone numbers for the organization where this application or proceeding is assigned as (571) 273-8300 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/A. S. A./

Examiner, Art Unit 2137

07-09-2008

/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2137